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P#11

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/613,972A

DATE: 07/10/2002  
TIME: 10:31:04

Input Set : A:\P1765R1.txt  
Output Set: N:\CRF3\07102002\I613972A.raw

ENTERED

3 <110> APPLICANT: P. Mickey Williams  
4 Mary E. Gerritsen  
6 <120> TITLE OF INVENTION: PROMOTION OR INHIBITION OF ANGIOGENESIS AND  
7 CARDIOVASCULARIZATION BY TUMOR NECROSIS FACTOR  
8 LIGAND/RECEPTOR HOMOLOGS  
10 <130> FILE REFERENCE: P1765R1  
12 <140> CURRENT APPLICATION NUMBER: US 09/613,972A  
13 <141> CURRENT FILING DATE: 2000-07-11  
15 <150> PRIOR APPLICATION NUMBER: US 60/143,304  
16 <151> PRIOR FILING DATE: 1999-07-12  
18 <160> NUMBER OF SEQ ID NOS: 22  
20 <210> SEQ ID NO: 1  
21 <211> LENGTH: 1008  
22 <212> TYPE: DNA  
23 <213> ORGANISM: Homo sapiens  
25 <400> SEQUENCE: 1  
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28 cctccgggca gggcggtga ggacggggac gggcggtgct caactggctg 100  
30 tgggtctctg aaaccgagc atggcacagc acggggcgat gggcgcgctt 150  
32 cgggccctgt gggccctggc gctgctgtgc gcgctcagcc tgggtcagcg 200  
34 cccacccggg ggtcccggtt gggccctggc gcgctcctg cttgggacgg 250  
36 gaacggagcg gcgctgctgc cgggttcaca cgacgcgctg ctgccgcgat 300  
38 taccggggcg aggagtgtg ttccgagtgg gactgcatgt gtgtccagcc 350  
40 tgaattccac tgcggagacc cttgctgcac gacctgccg caccaccctt 400  
42 gtccccaggg ccagggggta cagtcccagg ggaaattcag ttttggttc 450  
44 cagtgtatcg actgtgcctc ggggaccttc tccgggggac acgaaggcca 500  
46 ctgcaaacct tggacagact gcacccagtt cgggtttctc actgtgttcc 550  
48 ctgggaacaa gaccacaaac gctgtgtgcg tcccagggtc cccgccggca 600  
50 gagecgcttg ggtggctgac cgtcgtcctc ctggccgtgg ccgctgcgt 650  
52 cctcctcctg acctcgcccc agcttgact gcacatctgg cagctgagga 700  
54 gtcagtgcag gtggccccga gagaccagc tgctgctgga ggtgccgccg 750  
56 tcgaccgaag acgccagaag ctgccagttc cccgaggaag agcggggcga 800  
58 gcgatcgcca gaggagaagg ggcggctggg agacctgtgg gtgtgagcct 850  
60 ggccgtcctc cggggccacc gaccgcagcc agccccctcc caggagctcc 900  
62 ccaggccgca ggggctctgc gttctgctct gggccgggcc ctgctccct 950  
64 ggcagcagaa gtgggtgcag gaaggtggca gtgaccagcg ccctggacca 1000  
66 tgcagttc 1008  
68 <210> SEQ ID NO: 2  
69 <211> LENGTH: 723  
70 <212> TYPE: DNA  
71 <213> ORGANISM: Homo sapiens  
73 <400> SEQUENCE: 2  
74 atggcacagc acggggcgat gggcgcgctt cgggccctgt gggccctggc 50

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76 gctgctgtgc ggcctcagcc tgggtcagcg cccaccggg ggtcccgggt 100
78 gcggccctgg gcgcctcctg cttgggacgg gaacggacgc gcgctgctgc 150
80 cgggttcaca cgacgcgctg ctgccgcgat taccgggcg aggagtgcg 200
82 ttccgagtggt gactgcatgt gtgtccagcc tgaattccac tgcggagacc 250
84 cttgctgcac gacctgccgg caccaccctt gtccccagc ccagggggta 300
86 cagtcccagg ggaaattcag ttttggttc cagtgtatcg actgtgcctc 350
88 ggggaccttc tccgggggcc acgaaggcca ctgcaaacct tggacagact 400
90 gcacccagtt cgggtttctc actgtgttcc ctgggaacaa gaccacaac 450
92 gctgtgtgcg tcccagggtc cccgccggca gagccgcttg ggtggctgac 500
94 cgctgcctc ctggccgtgg ccgcctgcgt cctcctcctg acctcgccc 550
96 agcttgact gcacatctgg cagctgagga gtcagtgcg gtggccccga 600
98 gagaccagc tgctgctgga ggtgccgccg tcgaccgaag acgccagaag 650
100 ctgccagttc cccgaggaag agcggggcga gcgacggca gaggagaagg 700
102 ggcggtggtg agacctgtgg gtg 723
104 <210> SEQ ID NO: 3
105 <211> LENGTH: 241
106 <212> TYPE: PRT
107 <213> ORGANISM: Homo sapiens
109 <400> SEQUENCE: 3
110 Met Ala Gln His Gly Ala Met Gly Ala Phe Arg Ala Leu Cys Gly
111 1 5 10 15
113 Leu Ala Leu Leu Cys Ala Leu Ser Leu Gly Gln Arg Pro Thr Gly
114 20 25 30
116 Gly Pro Gly Cys Gly Pro Gly Arg Leu Leu Leu Gly Thr Gly Thr
117 35 40 45
119 Asp Ala Arg Cys Cys Arg Val His Thr Thr Arg Cys Cys Arg Asp
120 50 55 60
122 Tyr Pro Gly Glu Glu Cys Cys Ser Glu Trp Asp Cys Met Cys Val
123 65 70 75
125 Gln Pro Glu Phe His Cys Gly Asp Pro Cys Cys Thr Thr Cys Arg
126 80 85 90
128 His His Pro Cys Pro Pro Gly Gln Gly Val Gln Ser Gln Gly Lys
129 95 100 105
131 Phe Ser Phe Gly Phe Gln Cys Ile Asp Cys Ala Ser Gly Thr Phe
132 110 115 120
134 Ser Gly Gly His Glu Gly His Cys Lys Pro Trp Thr Asp Cys Thr
135 125 130 135
137 Gln Phe Gly Phe Leu Thr Val Phe Pro Gly Asn Lys Thr His Asn
138 140 145 150
140 Ala Val Cys Val Pro Gly Ser Pro Pro Ala Glu Pro Leu Gly Trp
141 155 160 165
143 Leu Thr Val Val Leu Leu Ala Val Ala Ala Cys Val Leu Leu Leu
144 170 175 180
146 Thr Ser Ala Gln Leu Gly Leu His Ile Trp Gln Leu Arg Ser Gln
147 185 190 195
149 Cys Met Trp Pro Arg Glu Thr Gln Leu Leu Leu Glu Val Pro Pro
150 200 205 210
152 Ser Thr Glu Asp Ala Arg Ser Cys Gln Phe Pro Glu Glu Glu Arg
153 215 220 225

```

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```

155  Gly Glu Arg Ser Ala Glu Glu Lys Gly Arg Leu Gly Asp Leu Trp
156                230                235                240
158  Val
161 <210> SEQ ID NO: 4
162 <211> LENGTH: 951
163 <212> TYPE: DNA
164 <213> ORGANISM: Homo sapiens
166 <400> SEQUENCE: 4
167  ggcacagcac ggggcgatgg gcgcgtttcg ggccctgtgc ggccctggcgc 50
169  tgctgtgcgc gctcagcctg ggtcagcgcc ccaccggggg tcccgggtgc 100
171  ggccctgggc gcctcctgct tgggacggga acggacgcgc gctgctgccg 150
173  gggtcacacg acgcgtgct gccgcgatta cccgggagag gaggctggtt 200
175  ccgagtggga ctgcatgtgt gtccagcctg aattccactg cggagaccct 250
177  tgctgcacga cctgccggca ccacccttgt ccccaggcc agggggtaca 300
179  gtcccagggg aaattcagtt ttggttcca gtgtatcgac tgtgcctcgg 350
181  ggaccttctc cgggggccac gaaggccact gcaaaccttg gacagactgc 400
183  acccagttcg ggtttctcac tgtgttccct ggggaacaag acccacaacg 450
185  ctgtgtgcgt cccagggtcc ccgccggcag agccgcttgg gtggctgacc 500
187  gtcgtcctcc tggcgtggc cgctgcgtc tcctcctgac ctccggcccag 550
189  cttggactgc acatctggca gctgaggagt cagtgcattg ggccccgagg 600
191  tctgtcacag cctggtgcgg ggaggtggga gcatggctgc ctgctgaccg 650
193  tggccccctc gcatagacct agctgctgct ggaggtgccg ccgtcgaccg 700
195  aagacgccag aagctgccag ttccccgagg aagagcgggg cgagcgatcg 750
197  gcagaggaga aggggaggct gggagacctg tgggtgtgag cctggctgtc 800
199  ctccggggcc accgaccgca gccagccct ccccaggagc tcccagggcc 850
201  gcaggggctc tgcgttctgc tctgggccgg gccctgctcc cctggcagca 900
203  gaagtgggtg caggaagggt gcagtgaacca gcgcctgga ccatgcagtt 950
205  c 951
207 <210> SEQ ID NO: 5
208 <211> LENGTH: 28
209 <212> TYPE: DNA
210 <213> ORGANISM: Artificial sequence
212 <220> FEATURE:
213 <223> OTHER INFORMATION: Sequence is synthesized.
215 <400> SEQUENCE: 5
216  ggcacagcac ggggcgatgg gcgcgttt 28
218 <210> SEQ ID NO: 6
219 <211> LENGTH: 19
220 <212> TYPE: DNA
221 <213> ORGANISM: Artificial sequence
223 <220> FEATURE:
224 <223> OTHER INFORMATION: Sequence is synthesized.
226 <400> SEQUENCE: 6
227  cacagcacgg ggcgatggg 19
229 <210> SEQ ID NO: 7
230 <211> LENGTH: 40
231 <212> TYPE: DNA
232 <213> ORGANISM: Artificial sequence
234 <220> FEATURE:

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235 &lt;223&gt; OTHER INFORMATION: Sequence is synthesized.

237 &lt;400&gt; SEQUENCE: 7

238 agcctgggtc agcgccccac cgggggtccc ggggtgcggcc 40

240 &lt;210&gt; SEQ ID NO: 8

241 &lt;211&gt; LENGTH: 17

242 &lt;212&gt; TYPE: DNA

243 &lt;213&gt; ORGANISM: Artificial sequence

245 &lt;220&gt; FEATURE:

246 &lt;223&gt; OTHER INFORMATION: Sequence is synthesized.

248 &lt;400&gt; SEQUENCE: 8

249 cgctgaccca ggctgag 17

251 &lt;210&gt; SEQ ID NO: 9

252 &lt;211&gt; LENGTH: 40

253 &lt;212&gt; TYPE: DNA

254 &lt;213&gt; ORGANISM: Artificial sequence

256 &lt;220&gt; FEATURE:

257 &lt;223&gt; OTHER INFORMATION: Sequence is synthesized.

259 &lt;400&gt; SEQUENCE: 9

260 gaggagtgt gttccgagtg ggactgcatg tgtgtccagc 40

262 &lt;210&gt; SEQ ID NO: 10

263 &lt;211&gt; LENGTH: 27

264 &lt;212&gt; TYPE: DNA

265 &lt;213&gt; ORGANISM: Artificial sequence

267 &lt;220&gt; FEATURE:

268 &lt;223&gt; OTHER INFORMATION: Sequence is synthesized.

270 &lt;400&gt; SEQUENCE: 10

271 gaaggtcccc gaggcacagt cgatata 27

273 &lt;210&gt; SEQ ID NO: 11

274 &lt;211&gt; LENGTH: 18

275 &lt;212&gt; TYPE: DNA

276 &lt;213&gt; ORGANISM: Artificial sequence

278 &lt;220&gt; FEATURE:

279 &lt;223&gt; OTHER INFORMATION: Sequence is synthesized.

281 &lt;400&gt; SEQUENCE: 11

282 gctctgcgtt ctgctctg 18

284 &lt;210&gt; SEQ ID NO: 12

285 &lt;211&gt; LENGTH: 24

286 &lt;212&gt; TYPE: DNA

287 &lt;213&gt; ORGANISM: Artificial sequence

289 &lt;220&gt; FEATURE:

290 &lt;223&gt; OTHER INFORMATION: Sequence is synthesized.

292 &lt;400&gt; SEQUENCE: 12

293 ctggctcactg ccaccttcct gcac 24

295 &lt;210&gt; SEQ ID NO: 13

296 &lt;211&gt; LENGTH: 1964

297 &lt;212&gt; TYPE: DNA

298 &lt;213&gt; ORGANISM: Homo sapiens

300 &lt;220&gt; FEATURE:

301 &lt;221&gt; NAME/KEY: unsure

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Input Set : A:\P1765R1.txt

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302 &lt;222&gt; LOCATION: 1857, 1875

303 &lt;223&gt; OTHER INFORMATION: unknown base

305 &lt;400&gt; SEQUENCE: 13

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306 cagctctcat ttctccaaaa atgtgtttga gccacttgga aaatatgcct 50
308 ttaagccatt caagaactca aggagctcag agatcaccct ggaagctgtg 100
310 gctcttttgc tcaatagtta tgttgctatt tctttgctcc ttcagttggc 150
312 taatctttat ttttctccaa ttagagactg ctaaggagcc ctgtatggct 200
314 aagtttgac cattaccctc aaaatggcaa atggcatctt ctgaacctcc 250
316 ttgcgtgaat aaggtgtctg actggaagct ggagatactt cagaatggct 300
318 tataattaat ttatggccaa gtggctccca atgcaaaact caatgatgta 350
320 gctccttttg aggtgctggt gtataaaaac aaagacatga taaaaactct 400
322 aacaaacaaa tctaaaatcc aaaatgtagg agggacttat gaattgcatg 450
324 ttggggacac catagacttg atattcaact ctgagcatca ggttctaaaa 500
326 aataatacat actggggtat cattttacta gcaaatcccc aattcatctc 550
328 ctagagactt gatttgatct cctcattccc ttcagcacat gtagaggtgc 600
330 cagtgggtgg attggaggga gaagatatcc aattttctaga gtttgtctgt 650
332 ctacaaaaat caacacaaac agaactcctc tgcacgtgaa ttttcatcta 700
334 tcatgcctat ctgaaagaga ctgaggggaa gagccaaaga cttttggttg 750
336 gatctgcaga aatacttcat taatccatga taaaacaaat atggatgaca 800
338 gaggacatgt gcttttcaaa gaatctttat ctaattcttg aattcatgag 850
340 tggaaaaatg gagtcttatt cccatggaag atttacctgg tatgcaaaaa 900
342 ggatctgggg cagtagcctg gctttgttct catattcttg ggctgctgta 950
344 attcattctt ctcatactcc catcttctga gacctccca ataaaaagta 1000
346 gactgatagg atggccacag atatgcctac cataccctac tttagatatg 1050
348 gtggtgttag aagataaaga acaatctgag aactattgga atagaggtac 1100
350 aagtggcata aaatggaatg tacgctatct ggaaatttct ctgggtttta 1150
352 tcttctcag gatgcagggt gctttaaaaa gccttatcaa aggagtcatt 1200
354 ccgaaccctc acgtagagct ttgtgagacc ttactgttgg tgtgtgtgtc 1250
356 taaacattgc taattgtaaa gaaagagtaa ccattagtaa tcattagggt 1300
358 taaccccaga atggtattat cattactgga ttatgtcatg taatgattta 1350
360 gtatttttag ctagctttcc acagtttgca aagtgtttc gtaaaacagt 1400
362 tagcaattct atgaagttaa ttgggcaggc atttggggga aaattttagt 1450
364 gatgagaatg tgatagcata gcatagccaa ctttctctca ctcataggac 1500
366 aagtgactac aagaggcaat gggtagtccc ctgcattgca ctgtctcagc 1550
368 tttagaattg ttatttctgc tctcgtgtta taagactcta aaacttagcg 1600
370 aattcacttt tcaggaagca tattccctt tagcccaagg tgagcagagt 1650
372 gaagctacaa cagatcttcc ctttaccagc acactttttt ttttttttcc 1700
374 tgcctgaatc agggagatcc aggatgctgt tcaggccaaa tcccaaccaa 1750
376 attccccctt tcaactttgca gggcccatct tagtcaaagt tgctaacttc 1800
378 taaaataata aatagcacta attcaaaatt tttggaatct taaattagct 1850
W--> 380 acttgcnngt tgcttgttga aaggnatata atgattacat tgtaaacaaa 1900
382 tttaaaatat ttatggatat ttgtgaaaag ctgcattatg ttaaataata 1950
384 ttacatgtaa agct 1964

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386 &lt;210&gt; SEQ ID NO: 14

387 &lt;211&gt; LENGTH: 177

388 &lt;212&gt; TYPE: PRT

389 &lt;213&gt; ORGANISM: Homo sapiens

391 &lt;400&gt; SEQUENCE: 14

392 Met Cys Leu Ser His Leu Glu Asn Met Pro Leu Ser His Ser Arg

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; N Pos. 1857,1875